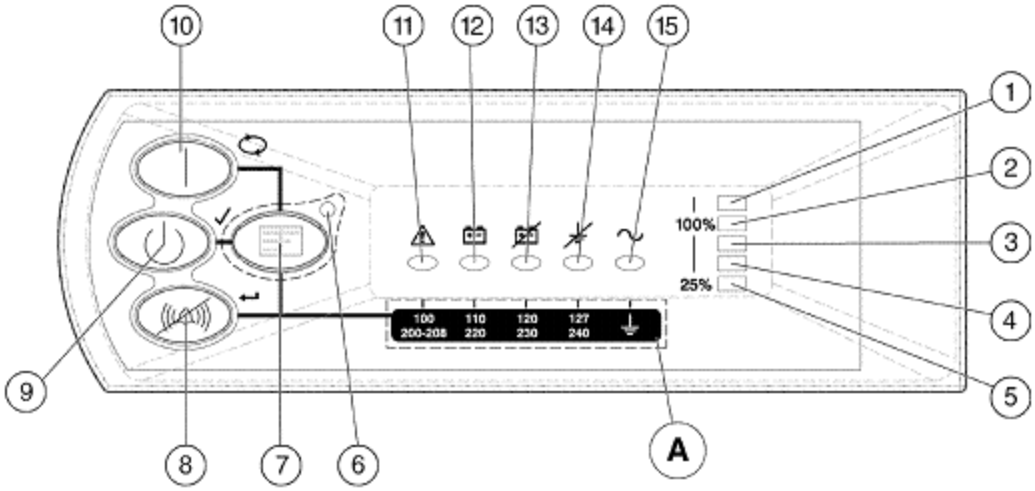
Overview

Rated up to1500 VA / 1340 Watts, the new HP UPS R1500 XR features a 2U rack-mountable design, and an improved easy-to-configure front panel display. Ideal for rack-mountable storage and server environment, this Uninterruptible Power System (UPS) is an enhancement of the legacy R1500 UPS, and is an integral part of the proven family of HP Power Management Products.
The new UPS R1500 XR is a high power density solution, designed for customers who want to provide power protection in space-constrained rack enterprise environments. In addition, this new UPS R1500 XR has the capability to be connected to up to two optional Extended Runtime Modules (ERM). Customers can further increase the run-time on their UPS R1500 XR by using this ERM. The Compaq UPS "XR" models denote "eXtended Runtime Capable" UPS models. This product is a refresh of our existing R1500 UPS, and brings increased power density and innovative features to the proven HP family of rack-mountable UPS products.



1. LED indicating Overload capacity
2. LED indicating 76% to 100% load capacity
3. LED indicating 51% to 75% load capacity
4. LED indicating 26% to 50% load capacity
5. LED indicating 0% to 25% load capacity
6. Configure mode on LED*
7. Configure Button*
8. TEST/ALARM RESET Button
9. STANDBY Button
10. ON Button
11. General Alarm
12. On Battery
13. Bad Battery/Low Battery
14. Site Wiring Fault Indicator
15. Utility LED

A. Voltage Configuration Panel*

*Accessible only when the front bezel is removed

Models

UPS R1500 XR - Low Voltage (US)	204404-001
UPS R1500 XR - Low Voltage (JPN)	204404-291
UPS R1500 XR High Voltage (INT'L)	204404-B31
Extended Runtime Module (ERM), R1500 XR (WW)	218971-B21

Overview

Key Features

- Increased power density with up to 1500VA/1340Watts of power packed in just 2U rack space
- Greater system uptime with support for Extended Runtime Module (ERM)
- Easy configuration through enhanced front panel display
- Enterprise-wide intelligent manageability with bundled power management software
- Support for HP Option Cards that extend the power management capabilities of the UPS
- More efficient voltage regulation with revolutionary technology
- Ultimate long-term battery reliability with HP Enhanced Battery Management
- Enhanced system flexibility with two independently controlled load segments
- Support for Remote Emergency Power Off (REPO) circuitry
- Easy serviceability through modular design
- Hot-Swappable Batteries
- Backed by a limited three-year warranty, Compaq's Pre-Failure warranty, and a $25,000 load protection guarantee

NOTE: Certain restrictions and exclusions apply

Product Highlights

2U Power Packed Design

Rated up to1500VA/1340W, the HP UPS R1500 XR packs more power in space-conserving rack-mount design, allowing you to support more critical equipment in your rack.

Increase System Uptime with Extended Runtime Modules

The Extended Runtime Modules are rack mounted battery modules that occupy 2U(3.5 inches) of rack space. The UPS R1500 XR supports up to two Extended Runtime Modules (ERM), which extend your overall battery runtime.

Lower Cost of Ownership with Innovative Technology

The UPS R1500 XR utilizes a line-interactive plus topology which features sine wave output and superior input/output voltage regulation. This technology is inherently reliable and highly efficient. The HP UPS can correct input voltage variations as low as -35% of nominal voltage without transferring to the battery. This will ensure the battery is preserved and ready for the next power anomaly

Investment Protection with HP Enhanced Battery Management

The UPS R1500 XR incorporates Enhanced Battery Management: an exclusive, patented technology that doubles battery service life, optimizes battery recharge time, and provides advance notice of pending battery failure. With Enhanced Battery Management, you have a lower total cost of ownership and receive the best in the industry protection for your critical equipment.

Enhanced System Flexibility with HP Option Cards

The UPS R1500 XR models are equipped with a standard serial communications port via an internal slot. This option slot supports two option cards, the Six Port Card and the SNMP / Serial Port Card. These option cards seamlessly integrate into the back of the R1500 XR and provide increased system flexibility.

Remotely Monitor UPSs on the Network

The SNMP/Serial Port Card features the ability to perform simultaneous network and out-of-band communications. It enables network administrators to remotely monitor UPSs and reboot network devices. It provides SNMP functionality, including power event alerts, network power diagnostics, and remote UPS reboot and testing. Used in conjunction with the provided Online power management software or SNMP capable Network Management Software, power-related problems on the network are quickly discovered and remedied.

Easy Configuration via Enhanced Front Panel Display

LED and switch membrane integrated into the front panel with four button controls (three buttons for UPS power control and one button under the front bezel for configuration)

Intelligent Manageability

HP Power Management Software, an integrated component of HP Insight Manager, the industry-leading hardware management platform, is included with the R1500 XR models. The HP Power Management Software enables you to monitor and controlHP UPSs locally or remotely. This software is a versatile, fully configurable, alert response tool that gives system administrators a full overview of the network's conditions. It enables you to monitor system status and power conditions, configure shut down timing, customize alert messages, and perform UPS diagnostic checks quickly and easily.

Independently Controllable Load Segments

With two load segments, you have the flexibility to configure scheduled startups and shutdowns, in addition to independently control the separate load segments. Working in conjunction with HP Power Management Software, the HP UPS R1500 XR can be configured to extend the runtime for more critical devices.

Ease of Maintenance with Hot-Swappable Batteries and Electronics Modules

The UPS R1500 XR is modular in design, and both the battery and the electronics modules are hot swappable. HP UPSs are designed with simple access through the front panel. Users can safely install new batteries and even the electronics module without ever powering down connected server and server options.

HP Quality

HP's hardware qualification is the toughest in the industry. Extensive evaluation, testing, product improvement, and an unsurpassed warranty guarantee the highest level of system protection, electrical performance, product quality and compatibility.

Warranty

The HP UPS R1500 XR is covered by a three year, limited warranty. Also, standard on all HP UPS units, is our exclusive Pre-Failure Warranty which extends the advantage of a HP three-year, limited warranty by applying it to the battery before it actually fails. This warranty is offered worldwide. Specifically, the Pre-Failure Battery Warranty ensures that when customers receive notification from HP Power Management Software that the battery may fail, the battery is replaced free of charge under the warranty.

NOTE: $25,000 Computer/Load Protection Guarantee is also provided, in addition to the HP three year, limited warranty.

Service and Support, HP Care Pack, and Warranty Information

Software Product Services

- Stand-alone telephone support
- Rights to a new license
- Media and documentation updates

Hardware Product Services

- Installation services
- On-site Maintenance (includes warranty support)
- Response time upgrades during the warranty period
- Post-warranty coverage
- RAID setup and performance consulting via statement of work

For additional hardware installation and maintenance information please refer to the URLs listed below:
http://h18005.www1.hp.com/services/carepaq/us/install/cp_storage.html
http://h18005.www1.hp.com/services/carepaq/us/hardware/cp_storage.html

Warranty Upgrade Options

- Response – Upgrade on-site response from next business day to same day 4-hours
- Coverage – Extend hours of coverage from 5 days x 9 hours to 7 days x 24 hours
- Duration – Select duration of coverage for a minimum period of 1 year or multiple years

HP Care Pack Information

Sample part numbers:

3 year, uplift to 5 x 9, Next Day Response	FM-**XHW-36
3 year, uplift to 5 x 9, 4-hour Response	FM-**4HR-36
3 year, uplift to 7 x 24, 4-hour Response	FM-**724-36

** represents a two-digit, product-specific code

- HP Care Pack is defined as an upgrade to the product warranty attribute, available for a specific duration and hours of coverage.
- HP Care Pack is not available for less than the product's warranty duration.
- HP Care Pack is available for sale anytime during the warranty period for most products, but the commencement date will be the same as the Warranty Start Date (delivery date to end user customer). Proof of purchase may be required.
- HP Care Pack services are prepaid.

For additional HP Care Pack (hardware & software) information, as well as orderable part numbers, please refer to the URL listed below:
http://h18005.www1.hp.com/services/carepaq/index.html.

UPSs up to 3KVA; and all PDU's have services covered under the services for Racks/Cabinets, Enclosure:

9x5 Next-Business-Day On-Site Coverage - 3 Years	FM-CBXHW-36
9x5 4-Hour Response On-Site Coverage - 3 Years	FM-CB4HR-36
24x7, 4-Hour Response On-Site Coverage- 3 Years	FM-CB724-36

UPSs smaller than 3KVA (not including 3 KVA)

9x5, 4-Hour Response On-Site Coverage -3 Years	FM-UP4HR-36
24x7, 4-Hour Response On-Site Coverage- 3Years	FM-UP724-36

UPSs from 3KVA - 6KVA (not including 6 KVA)

9x5, 4-Hour Response On-Site Coverage- 3 Years	FM-UR4HR-36
24x7, 4-Hour Response On-Site Coverage- 3 Years	FM-UR724-36

UPSs 6KVA and larger

9x5, 4-Hour Response On-Site Coverage- 3 Years	FM-US4HR-36
24x7, 4-Hour Response On-Site Coverage- 3 Years	FM-US724-36

Optional SNMP/Serial Port Card	Ideal for networked environments, this option card enables network administrators to remotely diagnose, monitor and reboot network devices via SNMP.	192189-B21
Optional Six Port Card	This option card lets you communicate (via standard DB-9 serial ports) with multiple servers. The maximum number of servers that can be connected using this card depends on the number of load segments available on the UPS. The R3000 XR has 3 load segments, so this card will allow you to serially communicate with up to 3 servers. And the R1500 XR has 2 load segments, so you can communicate with up to 2 servers using this card.	192185-B21
Extended Runtime Module (ERM), R1500 XR	The UPS R1500 XR supports up to two Extended Runtime Modules. Each module is 2U (3.5 inches), a rack mountable battery module that extends your overall battery runtime.	218971-B21

UPS R1500 XR Model Matrix

Part Number	Operating Voltage Settings	Power Out (VA/Watts)	Input Connection	Output Connection
Low-Voltage Models				
204404-001	120V	1440/1340	NEMA 5-15P	(6) 5-15R
204404-291	100V	1500/1340	NEMA 5-20P	(6) 5-15R
	NOTE: Part Number 204404-001 is user selectable for 110V, 120V, or 127V via front panel.			
High Voltage Model				
204404-B31	230V	1500/1340	IEC-320 C14	(6) IEC 320-C13
	NOTE: Part Number 204404-B31 is user selectable for 220V, 230V, or 240V via front panel.			
Kit Contents	HP UPS R1500 XR HP Power Management Software CD Power Products Documentation CD Depth adjustable fixed rack mounting rails Communications cable (12 ft) Additional IEC to IEC jumper cords, and detachable country specific input cord with the high voltage INTL model			
Unit Dimensions	19.1 x 3.4 x 17.0 in (48.51 x 8.64 x 43.18 cm)			
Shipping Dimensions	32 x 11.5 x 26.75 in (81.28 x 29.21 x 67.95 cm)			
Unit Weight	50 lb (23 kg)			
Shipping Weight	76 lb (34.5 kg)			

Technical Specifications

Electricial Input	Voltage Range	100, 120 and 230V models. See Model Matrix for nominal and user selectable voltage settings
	Frequency	50/60 Hz ± 5Hz (auto sensing)
	Input Plug	See Model Matrix
	Online Efficiency	95%
	Surge Suppression	High Energy 6500A peak
	REPO	Remote Emergency Power-Off disables AC power to load
Electrical Output	Online Regulation	-10% to +6% of nominal voltage
	On battery Regulation	±5% of nominal voltage
	Voltage Wave Form	Sine wave
	Connections	See Model Selection Matrix; divided into 2 Load Segments
	Output Protection	Re-settable circuit protectors
Battery	Type	Maintenance-free, sealed, valve-regulated lead acid (VRLA)
	Extended Batteries	ERM with two battery strings
	Backup Time	See Backup Times Chart
	Recharge Time	<3 hours to 80% usable capacity; <24 hours for complete recharge
	Voltage	48V Battery String
Communications	Serial Ports	Standard DB-9 ports (ships with communication cable)
	Option Slot	One
	Option Cards	Six Port Card and SNMP / Serial Port Card
	LED Indicators	LED and switch membrane integrated into the front panel; with four-button control (three buttons for UPS power control and one button under the front bezel for configuration).
	Software	Compaq Power Management Software
Environmental and Safety	Operating Temperature	50° to 104° F (10° to 40° C)
	Transit Temperature	-13° to 131° F (-25° to 55° C)
	Storage Temperature	32° to 77° F (0° to 25° C)
	Humidity (Operation)	20% to 80% (non-condensing)
	Humidity (Non-operating)	5% to 95%
	Operating Altitude	Up to 10,000 ft (3048 m) above sea level
	Storage Altitude	30,000 ft (9,144 m) above sea level
	Audible Noise	<46db (at 1m from surface of unit)
	Safety Markings	FCS, UL, CSA, VDE, NEMKO, FIMKO, DEMKO, SEMKO, NOM
	Safety Certifications	UL1778; CSA22.2 No.107.1,No.107.2,No.950; CB Bulletin No.86AI; EN50091-1; EN60950; EMKO-TSE207/95; NOM-019-SCFI-1993
	EMC Markings	FCC; CISPR; VCCI; CE
	Emissions	FCC CFR 47, Part 15 Class A, EN50091-2
	Immunity	IEC 801-2, IEC 801-3, IEC 801-4, IEC 801-5
	Surge Suppression	Conforms to IEEE 587B and ANSI C62.41
	REPO Port	Meets NEC code 645-11 intent and UL requirements

Estimated Backup Times Chart (Minutes)

Load (Percent*)	With Standby Battery	With 1 ERM	With 2 ERMs
20	34	146	290
50	13	57	161
80	6	32	63
100	5	23	49

* Percent of 1500VA or 1340W of load

NOTE: Backup times are estimated for typical applications. Actual performance will depend on load and battery conditions.

Compatiblity Compatible with all HP servers, storage, racks, rack options, and other rack mountable HP equipment.

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